Registration Mark flagging the pipeline segment's top position, the code terminating Registration Mark flags the pipeline segment's 3 o'clock position. This feature, of course, is attributable to related coupons **340** A and C constituting delimiting means for the related medial location of coupon **340** B disposed at 3 o'clock. Similarly, coupons **335** B and C delimit the 12 o'clock location of coupon **335** A, thereby flagging the beginning code Registration Mark.

[**0048**] It will be understood that spacing of markers is important for assuring a readable code. Thus, markers are only placed in the top, right, bottom, and left sides to sustain code-legibility for low-resolution smart pigs. It will be appreciated by those skilled in the art that installation of the code structure taught by the present invention should preferably provide sufficient space between marker coupons. For example, it has been found that, when installing the character zero—requiring markers in all four positions—the plurality of markers should preferably be separated by a space equal to or greater than the width of an individual marker, in order to achieve the readability objectives of the present invention. Referring to **FIG. 8**, there is shown a simplified sketch of pipeline P having plurality of coupons C**10**, C**20**, C**30**, etc. as appropriate to properly represent the PIPS code as contemplated by the present invention. Relative to weld W, first coupon C**10** is disposed on the internal diameter of pipeline segment P at about 3 feet from weld W to represent the first alphanumeric character. It has been found advantageous to install successive coupon C**20** on the internal diameter of pipeline segment P at about 1 foot from previously placed coupon C**10**. Successive coupon C**30** should preferably be placed on the internal diameter of pipeline segment P at about 1 foot from previously placed coupon C**20**. Similarly, coupons successive to C**30**, etc., should preferably be placed on the internal diameter of pipeline segment P at about 1 foot from the corresponding immediately previously placed coupon. As hereinbefore described in detail, it is contemplated that the last alphanumeric character wilt be a terminating end-of-code Registration Mark.

[**0049**] As hereinbefore described, the first character in a PIPS installation is a Registration Mark flagging the beginning of the pipe section identification and location code. It will become obvious that this Registration Mark informs the operator that a code follows. The code is installed to follow the flow of the product traveling within the pipeline, and is read conventionally from left to right. If this flow were reversed, then the Registration Mark would be the last character on the graph, indicating that the installation was in the opposite direction. It will be appreciated that the code is read, for reversed pipeline flow, from right to left.

[**0050**] It will be noted that the Registration Marks of the present invention inherently identify the top position of the pipeline. This feature is useful for verifying the accuracy of the radial orientation provided by a smart pig or the like.

[**0051**] To implement the appropriate code for a pipeline segment, the next alphanumeric character is preferably emplaced in a circumference several inches apart from the beginning Registration Mark. It has been found to be preferable to sustain a separation between parallel lines of code at least twice the length of the individual marker coupons. For instance, areas that are marked with 2-inch square coupons should preferably have characters that are separated by 4 inches (2×2 in). As will become clear to those skilled in the art, such a sufficiently spaced installation of coupons should prevent crowding of signals that are recorded by smart pigs or the like.

[**0052**] Referring now to **FIGS. 12 A and B**, there is seen an alternative embodiment of the plurality of marker coupons of the present invention disposed at less than 90° spaced-apart clock positions. In particular, **FIG. 12A** depicts a simplified end view of a section of pipe showing a PIPS code implemented with marks that are disposed within the wall structure at less than 90° clock positions. Similarly, **FIG. 12B** depicts a simplified end view of a section of pipe showing the PIPS code implemented with marks that are disposed on the circumference at less than 90° spaced-apart positions. It should be evident that the thickness and frequency of such marker coupons would depend upon the pipe diameter and the like. It is contemplated that vital information about pipe manufacture such as manufacturer code, batch identification, material of composition, etc. Under the present invention, these markings would be tracked similar to the UPC code affixed to conventional goods. Scanning of these PIPS codes could be achieved by using special instrumentation, some of which may already be established as part of quality control procedures at the manufacturing site. This manufacturing data would be stored in a pipeline database to promote quality assurance and public safety and health. Quality and performance would be monitored during pipeline construction, maintenance, and decommissioning. Historical maintenance and accident-recovery data, of course, would be sustained in the database. It will be appreciated that a benefit of the present invention is that batches of pipe could be correlated with pipeline performance under a diversity of geographical and environmental scenarios. Obviously, batches of pipe would be correlated with their final destinations underground. Such knowledge would be profoundly useful to operators in the field for identifying potential problems that might be faced by other users of the same production run. Other pipeline owners of the same pipeline material could now share information related to performance of pipe on a batch-by-batch basis.

[**0053**] It will be readily appreciated by those skilled in the art that Registration Marks of the present invention may be used to identify and locate the beginning and end of specific sections of pipe. For example, areas that are not usually identified by smart pigs should be flagged with Registration Marks to avoid unnecessary excavations and to assign priorities in associated maintenance programs. Also, areas that have been repaired with composite material that tends not to be detected by smart pigs are flagged with Registration Marks to avoid excavating the same area. Obviously, this is an important aspect of the present invention because smart pigs will detect metal loss left by corrosion damage, but will not identify non-metallic sleeves. It will become clear that the present invention is also suitable for areas where light corrosion and damage to a pipeline's protective coating requires sandblasting and re-application of coating material.

[**0054**] It will be understood that in embodiments using externally-applied coupons, markers of identical size, shape, and wall thickness are applied externally to the pipe, either with glue, epoxy, welded, or fusion bonded to the pipeline wall, depending upon the nature and composition of the pipeline. On the other hand, in embodiments using inter-